

METHOD AND SYSTEM FOR CONSTRAINT-BASED TRAFFIC FLOW OPTIMISATION

MDS
6.30.05*This application is a 371 of PCT/GB03/00669 02/17/2003*

5 This invention relates to traffic flow optimisation systems. More particularly, but not exclusively, it relates to methods of calculating data traffic flows in a communications network.

Background

10 Today, large communications networks are serviced by more than 30,000 Internet Service Providers (ISPs) across the world, predominantly operating on a commercial basis as a service provider. The services range from the mass-marketing of simple access products to service-intensive operations that provide specialized service levels to more localized internet markets. The present application mainly concerns ISPs providing networks, referred to more generally as network service providers.

15 With networks playing an ever-increasing role in today's electronic economy, an efficient management of the networks and an efficient planning of future modifications is advantageous.

20 With the rapid growth of network usage, network service providers are currently facing ever increasing expectations from their customers to the quality of service (minimum delay, maximum reliability, high bandwidth for data transfer rates, low costs, etc). The main task is to satisfy the quality of service parameters while maximising the return of investment, i.e. to ensure an efficient utilisation of the available bandwidth in addition, but there are